[00:00:38.08] **JOHN KIRBY:** Judy, there's been an almost unprecedented onslaught against you. Multiple articles in the mainstream press, from the *Washington Post* to *Forbes*, have come out to attack you in the segment of the film, *Plandemic* that you appeared in. I want to separate your story from the film itself, as the two have been conflated. I want start just by asking Mr. Kennedy: you recently wrote the introduction to Dr. Judy's book, *Plague of Corruption*, and in that, you placed her in a long line of dissident scientists, from Rachel Carson, who discovered the dangers of DDT, to Alice Stewart, who found that x-rays during pregnancy led to carcinomas in children later on, researchers who were at first scorned and later hailed as heroes. What makes Judy a dissident in this tradition, and what is the *Semmelweis effect*?

[00:01:20.07] **ROBERT F. KENNEDY, JR.:** Well, the *Semmelweis effect* is that dynamic that you describe, where predominant medical orthodoxies are safe-guarded ideologically in kind of a knee-jerk reaction by the medical community. And particularly, the doctors, and the medical cartel, and the medical community, tend to go immediately into a defense posture to defend things like, you know, x-raying pregnant women, even long after the establishment between that procedure and cancers in those children is well established.

[00:02:09.00] The same thing happened with thalidomide. The same thing happened with the use of Calomel, which was a mercury-based tooth powder that was used for a hundred years, and was finally terminated in 1950's, that was causing these devastating illnesses in children. DDT was another thing that the American Medical Association, because it had recommended DDT for the suppression of malaria, it was the last group to really, to be willing to back off and say, "Yeah, there's a problem here," even when the science was well, well established.

[00:02:46.10] Ignaz Semmelweis was a Hungarian doctor at a time when most, more than half, of women who went into hospitals were dying, for childbirth, were dying of puerperal fever, which was also known as birthbed fever. And he had an idea, this was before Pasteur or before germ theory, before anybody knew about germs, but he had an idea from his own anecdotal observations that the scientists who were, the doctors, who were the same doctors who were performing autopsies, that they were not cleaning their hands between the autopsies and delivering babies, and that they were bringing some kind of toxic particle into the birthing rooms. And he did an experiment where he got them to wash their hands and he dropped birth bed fever from around 50%, mortalities from around 50%, to around 2% of the women who came to the hospitals.

[00:03:50.27] When he published on that, at first he was applauded, but then suddenly, he was derided. And ultimately, he was tricked into going into a mental institution and apparently murdered. And the medical associations at that time, went against him with a vengeance because it challenged their kind of deified position as physicians by saying, "Something that you're doing, instead of helping patients, is actually hurting them." And that's part of the reason that we see this, you know, this enormous reaction to any kind of criticism of vaccines.

[00:04:33.05] And of course, you know, Judy's science was a devastating blow to them, because what Judy discovered, among many other things, what Judy discovered was that there was a virus that had been grown on mouse brain tissue. When you grow a vaccine, when you're making a vaccine, you grow them on animal tissues—on Cocker Spaniels, on mice, on pangolins, on bats, on horses, and on insects, and on human lung tissue from aborted fetuses. And that's how vaccines are made—most vaccines, or many vaccines.

[00:05:15.04] And Judy discovered a virus when she was assigned to work for, to look for, the cause of Chronic Fatigue Syndrome. Chronic Fatigue Syndrome was devastating illness that appeared in an epidemic form in the 1980's, and it effected mainly women. And the medical community behaved reprehensibly. They dismissed the disease as a psychosomatic illness. It was at a time when women were first entering the job force at high positions in corporations, and they said, "This illness is because women are not biologically equipped to handle that kind of responsibility that traditionally belonged to men, was the province of men, and that that's why they're getting these psychosomatic breakdowns." And what Judy found, when she actually started studying the disease for NIH, was that the women who complained of Chronic Fatigue Syndrome, and had been diagnosed, 63% of them had a virus that she was able to find and identify and isolate, that was called the XMRV virus. And that, only 4% of the control group, so of healthy women, had that incident of that virus in their blood.

[00:06:38.09] She published on that, and NIH and Tony Fauci, who was her boss, was okay with her publishing about it, because it didn't threaten any of their paradigms. But, subsequently, Judy learned from work that she did, and from work that other scientists were doing—and, by the way, XMRV, by then, had already been associated with many other diseases—with leukemias, and cancers, and a lot of really bad illnesses; very, very strong associations. And what Judy found out was that the source of the XMRV in the blood supply was coming, originally, from a vaccine that had been made, a polio vaccine, that had been made using mouse brain tissue, and it was a virus that was common in mice and it had made the leap to human beings through vaccination. And now it was not only in that polio vaccine, it was in Hepatitis A vaccine, it was in the MMR vaccine, and it had contaminated the entire blood supply.

[00:07:47.01] And that was something that Tony Fauci couldn't broach, because it was essentially an attack on his industry. It was saying that the vaccines that the NIH had blessed and anointed, had been part of the approval process at FDA, had urged CDC to recommend and mandate for 74 million children annually, that they had made a very, very bad mistake, and instead of saving lives, those vaccines were most likely to be causing more mortalities than they were averting. And that is a threat to the entire vaccine paradigm, and their only response to that threat was that Judy Mikovits had to be destroyed.

April 16, 2020

[00:08:38.14] **DR. JUDY MIKOVITS:** I'm Judy A. Mikovits. I graduated from the University of Virginia with a degree in chemistry in 1980; went directly to the National Cancer Institute in Frederick Maryland, where I was part of the team that made the first immune therapy that was *Interferon Alpha* and it was a curative therapy for Hairy cell leukemia. From there I joined the Biological Response Modifiers program in 1983, where I worked under the direction of Dr. Frank Ruscetti, who discovered the first human cancer-causing retrovirus and *cytokines* and immune therapy. There, we continued to work with AIDS patients. I was part of the team that isolated HIV from saliva and blood that confirmed Nobel Laureate, Luke Montagnier's discovery of HIV as a possible causative agent of AIDS.

[00:09:43.15] From 1987 to '91, I worked on my PhD thesis, which was award-winning in 1991. It changed the paradigm for HIV/AIDS as it said the T cell, the cell that was killed in HIV/AIDS, was not the target of therapy. It was actually the *monocyte macrophage*, which was the orchestrator of the immune response. So, the idea that you get damage from a distance when a virus infects and that you can have HIV and not get AIDS, if you protect the activation of a dormant

virus, keep it from being activated. In my post-doctoral studies, I worked in another laboratory at the National Cancer Institute, learning molecular virology, under Dr. Dave Derse, and what we did there was, along with Johns Hopkins' Dr. Stephen Baylin, we looked at other mechanisms by which viruses dysregulate, make abnormal, the immune response. Because it's not the virus, the infection, that is deadly, it's the immune response; it's the overactive immune response, in a susceptible individual that leads to the damage of the tissue and ultimately, in some cases, death.

[00:11:13.28] In 1999, I accepted the job as the Director of the Lab of Antiviral Drug Mechanisms at Fort Detrick, there, again, in the National Cancer Institute; that was an internationally recognized laboratory for excellence, and my job there was to build a team to look at AIDS-associated malignancies, AIDS-associated cancer. We made seminal discoveries in treatment and developing treatments for AIDS at that time. I, then, moved to California in 2001, where I directed the Cancer Biology program of Epigenx Pharmaceuticals, in Santa Barbara, California, and that was taking those discoveries and those medicines, everything we'd learned in the previous 25 years, and applying them to the development of drugs and diagnostics for AIDS cancer, associated with the mechanisms we've discovered.

[00:12:20.04] **KIRBY:** What is USAMRIID? When were you there, and what was your role?

[00:12:24.22] **MIKOVITS:** During the time that we were looking at *retroviruses*, in my post-doctoral studies, and their effect on the immune system, I worked with a collaborative effort with USAMRIID, that's the US Army Research Institute for Infectious Diseases, and it's right there at Fort Detrick, literally, right across the baseball field from my laboratory, at the National Cancer Institute. So, what my job was, in that collaboration, was to look at the Ebola virus, the Zaire strain, the highly pathogenic Ebola virus that was deadly. And my job was to teach the Ebola virus to infect human cells without killing them—or animal cells—to find a cell line to grow the virus so that we could study it, because you can't study a virus unless it's an *obligate parasite*. You need to have a host. It must grow in cells, so you can grow up a lot of the virus and study it, and study how it causes disease.

[00:13:36.06] I did that; I found several cell lines that the Ebola virus would live in, and grow quite happily without killing them; and from there, my job was to try to understand the difference between the very pathogenic Zaire strain and a harmless strain of Ebola virus called Ebola Virus Reston. So, what I did was infected primary white blood cells, fresh from a patient, an individual person, an uninfected healthy person, and I'd take those, and I'd infect one with the pathogenic strain, and one with the non-pathogenic strain, and I'd subtract the difference. What was the disease signature we were looking at? What was that immune response? What was the flame, the fire that destroyed the tissue, and caused the disease, the microvasculature, the bleeding, the blood disorders—what were those signals?

[00:14:35.18] And so, from that, we developed a signature of disease. And that's critical because I went on to do signatures of disease for certain types of *Non-Hodgkin's lymphomas*. We would call these categories just "Non-Hodgkin's Lymphoma," and the treatment really matters, if you understand what the dysfunction is, why the cancer developed, why the lymphoma developed, and that, not necessarily having anything to do with infection, it's just a signature of infection or disease.

[00:15:10.23] **KIRBY:** So, back to teaching the Ebola strain to infect healthy cells. What is *Gain-of-Function*, as it relates to virology? Is that what you were doing at that time, or was it attenuation? And what is the difference, and can you just describe those two concepts? [00:15:34.24] **MIKOVITS:** So, what I was doing at the time that I was teaching Ebola to

infect human cells is largely considered to be Gain-of-Function studies, because normally, Ebola is another virus that we get from bats, and it doesn't infect human cells. So, I'm *gaining* a function because I'm trying to teach it to infect human cells, and so that it can live happily in human cells. If I were doing studies to attenuate the virus, that is, make it weaker, which we would do in order to make vaccines, I would continuously pass it through another animal, not necessarily a human, but another animal, because the immune system, when it sees a virus and an infection, it gives you that inflammatory response, and it tries to suppress, to stop, the expression of the virus.

[00:16:37.16] A silent virus is not a problem to your immune system or the host, so you don't want it to divide and replicate and build reservoirs.

[00:16:48.07] **KIRBY:** Now, back, quickly, to Gain-of-Function studies: can you tell us, what did Francis Collins do, I believe, in 2013, and then what got reversed? Can you just talk about that?

[00:16:57.23] **MIKOVITS:** Right. So, a number of virologists, Simon Waine Hobson and others, our colleagues, said, "You know, it's really very dangerous to do this type of work." And so they advised Francis Collins, the head of the NIH, to literally put a moratorium on doing any—a law that said it was illegal in this country to do Gain-of-Function studies, to do that kind of culturing that I did back in 1999, because it became clear to us that the Ebola outbreak that killed 21,000 Liberians in 2014, was almost certainly the Zaire strain with many mutations that came by way of Fort Detrick in the US and—

[00:17:48.09] **KIRBY:** Do you think they were intentionally spread, or do you think that was accidental or what?

[00:17:53.11] **MIKOVITS:** I think it was accidental, but that was covered up then, and this was 2014. But certainly, there were more than 300 mutations in that Zaire strain that weren't there, prior to the manipulation in the laboratory at that time. So—

[00:18:11.14] **KIRBY:** So, sorry, go ahead, and tell—so there was a recommendation, you were saying—

[00:18:16.10] **MIKOVITS:** So, at the time, when all of that happened, there was a recommendation by Francis Collins, and he made it into a federal law, I believe, that said, "You can't do that type, or fund, that type of research in the United States, because it's too dangerous. The possibility that something, an agent, could be released, that's far more dangerous, and a world-wide pandemic could occur." So, when Tony Fauci funded these studies throughout that illegal time period, that's a problem.

[00:18:50.26] **KIRBY:** So, you're saying, he continued to do Gain-of-Function studies during the period that it was illegal—

[00:18:55.13] **MIKOVITS:** He continued to *fund* them. So, he funded the Wuhan researchers, in collaboration with the North Carolina researchers. I don't believe the North Carolina researchers had a biosafety level 4, so that work was largely done in Wuhan. But Tony Fauci funded it. And then, in 2017, mysteriously, the ban was lifted. And most people didn't know about it at the time, and only learned about it looking at this latest outbreak. "How could this happen? We had a law against this."

[00:19:32.09] **KIRBY:** So, I guess now is a good time, if you could, tell us: what is the process by which vaccines are manufactured; and what, in particular, is *xenotransplantation*, if you could just describe that process?

[00:19:50.18] **MIKOVITS:** Okay. So, the process, at least in the last few decades, by which vaccines are manufactured, is to take those cell lines that you have a virus growing in, whether they are the tissue, the animal tissue, that you grow the virus in—again, you can't make a lot of virus for the purpose of making the *antigen* in a vaccine without growing up large quantities of it, and for that you need those animal or human cell lines, or in fact, mouse cell lines; we use pig cell lines, it really depends. For most of my career, what I did was make cell lines. My job is to—cells don't grow outside of the body very long, because that's a definition of cancer.

[00:20:45.23] So, we transform cells from primary tissue and make it into cell lines. So, that's where we grow viruses. So, *xenotransplantation* is the term that we use for any time that you put foreign tissue in another animal, or any time you mix foreign tissue. So, technically, injecting animal tissue into humans, into human blood, in a vaccine, is xenotransplantation. Also, we would do surgery where we may take a pig aortic valve and replace [a valve in] somebody with heart surgery with a pig valve. And in the case of HIV patients, we didn't do that research because we recognized that a dormant virus in the pig could become pathogenic to somebody infected with another kind of human retrovirus, or other viruses of the same family, and cause a tremendous disease.

[00:21:57.03] **KIRBY:** Since you brought them up, please describe what is a *retrovirus*? And what makes it different from a regular virus?

[00:22:07.15] **MIKOVITS:** Well, a retrovirus is an RNA virus. We have many families of RNA viruses—influenza viruses are RNA viruses, corona viruses are RNA viruses—many, many RNA viruses. That means their nucleic acid (their genomic, their blueprint) is RNA, not DNA, like human blueprint. So, an RNA virus, a retrovirus, writes its RNA blueprint backwards—*reverse transcribe*, so they call it "retro," you write your RNA backwards, where you make DNA—and then, it has another enzyme, called *integrase*, that literally cuts open the DNA in the cell that the retrovirus infects, and inserts itself. So, every time that cell is replicated, say blood cells, every time you need to respond to an infection, or respond to stimulations, every day we turn over 109, 10 billion blood cells. So, those nucleated blood cells get integrated, and you're making a factory of virus.

[00:23:24.10] So, the coronavirus, or influenza viruses, aren't retroviruses, in that they don't integrate into your cells, into the cells of the host, so when the cell dies, the virus can't persist. Essentially, all animals have retroviruses in their genome. 8% of the human genome is built up of retroviruses. All animals have retroviruses, but they're crippled so that they're not expressed, so they don't cause disease in the host.

[00:23:58.29] **KIRBY:** What's the difference between *xenotransplantation* and *zoonosis*? [00:24:04.15] **MIKOVITS:** *Zoonosis* is that process of an animal virus (*zoo*), infecting another animal through a natural evolution. Let's just say that the meat isn't properly cooked, you know, pork, the meat isn't properly cooked, so you don't kill the pathogen, and you eat that, and it can infect you; or you cut yourself, in the case of, you know, some of the theories of how HIV jumped into humans from animals. So, zoonosis is just the process of evolution of a virus from its original species to now be able to infect another type of animal.

[00:24:55.05] **KIRBY:** Who is Frank Ruscetti, and what did he initially discover, and then what did you discover with him?

[00:25:01.29] **MIKOVITS:** So, Dr. Frank Ruscetti discovered the first family of disease-causing retroviruses, and it's called "Human T-Cell Leukemia Lymphoma virus"—that family. So, this wasn't known in 1980, when Bernie Poiesz and Frank Ruscetti isolated the viruses from people with a very aggressive cancer called Adult T-cell Leukemia. Frank also discovered *Interleuken-2*, -5, -15 and TGF beta, a key cytokine that is a master regulator of the hematopoietic—the blood—stem cell. So, really, your entire adaptive immune system is what Frank Ruscetti discovered. And without discovering these interleukins, these factors that are communication—*interleukin* means, "communicate between white blood cells,"—and without understanding the conversation between different subsets of cells, you can't understand why a cancer occurs, an overgrowth of those T-cells, a very aggressive, very fast-growing cancer, a deadly cancer, and it's causative because every human who has HTLV, has Adult T-cell Leukemia.

[00:26:29.21] Not necessarily in the cancer cell, but in their body. So, somehow, indirectly, largely, HTLV contributes to cancer and that's why it's causative.

[00:26:42.01] **KIRBY:** Tell me what you guys discovered and what you published in the *Journal of Science* in 2009.

[00:26:50.25] **MIKOVITS:** Well, in 2006, I moved from Epigenix Pharmaceuticals to build, to literally design, the first neuro-immune disease institute, and, using a systems biology approach, the same one we've used for our entire careers, we were studying the disease, Chronic Fatigue Syndrome, because people with Chronic Fatigue Syndrome have a lot of what we call, "opportunistic infections"—things that healthy people don't get. They have a lot of immune inflammatory *sequelae*. They have *cytokine storms*.

[00:27:32.10] **KIRBY:** I just want to pause really quickly. Can you just tell us, what are *cytokines* and what is a *cytokine storm*?

[00:27:38.25] **MIKOVITS:** "Cyto-" means "cells," and *cytokines* is just the term that immunologists gave to the communicating molecules, the mediators between cells in the immune system. And a *cytokine storm* is a large number of *cytokines*, let's just say, or a number of cytokines, 5-7 cytokines, that are expressed together, at the same time, and they're your army to go out and fight an invader. So, when that disease signature that we've been discussing is a cytokine storm, when a virus is pathogenic (infecting a human), you get the storm. If the virus is not pathogenic, there's no expression of the cytokines, because your immune system says, "that's harmless, we don't need to worry about that." But when there's something the immune system needs to target, the communicators between the cells are cytokines.

[00:28:44.29] So, one of the first things I did when I met the patients is, I did entire family studies, and you see a lot of cancers in the family, you see a lot of autism, you see a lot of what we call neuroimmune diseases (Parkinsons, Alzheimer's, things like that) as you follow the family, and you look at the environment for what toxin could have caused the disease. And then I did these kinds of signatures. So, the first thing that we did when we looked, when we formed the Institute, is go to whole families of some of the sickest people with Chronic Fatigue Syndrome, and we found they had a disease signature suggestive of a retrovirus.

[00:29:26.20] And, interestingly enough, that retrovirus had been described in men with very aggressive prostate cancers. So, you remember, when I was at Johns Hopkins University, my job at the lab of anti-viral drug mechanisms was [to] look at retroviral-associated cancers, and one of those was the very aggressive, the most aggressive, of prostate cancers. So, I knew of that work in 2005, and so we essentially began the process of isolating the retroviruses from the sickest of patients, and then getting the sequence and the diagnostics, and transmitting them, or looking at family members and seeing if the disease got the same cytokine storm, the same disease signature, that that work, that transmission and the isolation of that new family of viruses and association with a highly associated (I think there were probably 9 zeros in front of the 1), highly, highly, statistically significant that XMRV's we called them, or that's what the group that discovered the sequence in prostate cancer, they called it: Xenotropic ("Xeno" meaning "foreign") Murine (leukemia virus) Related Virus.

[00:30:52.26] So, there's a mouse-cancer causing virus that's associated, now, not only with prostate cancer, but when we published this paper in *Science*, October 8, 2009, now with connecting cancers to neurological diseases, which, of course, we saw with HIV/AIDS—some patients would get cancer, some would get neurologic disease.

[00:31:19.07] **KIRBY:** Where did you discover the XMRV, and run me through what the implications were?

[00:31:26.02] **MIKOVITS:** Well, we isolated it from patients, the most severely ill with Chronic Fatigue Syndrome. The XMRV had been described by DeRisi and Silverman, but they are not virologists, and they didn't isolate the virus. So, until you isolate the virus, and you show it can be transmitted to other white blood cells—there are a series of things called *Koch's Postulates*, or *Heel's Criteria*. So, this was really a big deal: a new family of disease-causing retroviruses. *One New Virus, How Many Old Diseases* was the editorial that John Coffin wrote that accompanied this really widely celebrated article in *Science*, because how many new diseases do we now have instant therapeutics for, which everybody mainly thought these people were, you know, "You're just Chronic Fatigue Syndrome, you're just tired." No, this is inflammation of the spinal cord and brain. And their brains don't work; their muscles don't work; they get a lot of infections, serious diseases that now we actually have a therapeutic target. It's huge to think about that.

[00:32:58.20] As soon as that paper came out, we were immediately contacted by our colleagues at the National Heart, Blood and Lung institute at NIH, and we started, day one that paper came out, with testing the blood supplies, developing tests to test the blood supply. Because, of course, we knew from our experience with HIV, that a contaminated blood supply was how HIV spread through populations that we were unaware of being susceptible to the viral infection. So, the blood supply, as those studies in 2011, March 29th, at the New York Academy of Sciences, I showed a presentation to show that, in fact, the blood supply was heavily contaminated, up to 10%, but as Dr. Ruscetti always taught me, so the minute we started the work to identify that the blood supply was heavily contaminated, a company contacted us, and said, "We have a technology that would decontaminate it." And, in fact, it did. So, we did side-by-side parallel studies all along to make sure we had a solution when I presented those data, March 29th of 2011. But, during this time, in the two years after the paper was published, a number of other troubling disease associations came up.

[00:34:32.21] First, many cancers: Chronic Lymphocytic Leukemia, Multiple myeloma—and these were not necessarily just us, but colleagues of ours. Everyone started to study the virus, and it became clear this infection was much more wide-spread than simply the three million Americans that, at that time, had a diagnosis of Chronic Fatigue Syndrome. So, you know, so we're now looking at things like Alzheimer's disease, like Parkinson's disease, Lou Gehrig's disease, which had long, we'd long had evidence of retroviral involvement in a number of inflammatory (what we call *idiopathic*) diseases, because we don't understand the pathogenesis—how, you know, what is associated, what causes the disease?

[00:35:21.11] So, that work became quite troubling, because of the cost of, you know, that a contaminated blood supply is what spread this infection through a population. And then, even more troubling was, one of our colleagues published a paper in January, an opinion paper, in a journal called *Frontiers in Microbiology*, January of 2011. And what that paper said is, one of the most widely distributed biological products where mouse tissues are used, are vaccines. And so, it is possible that the virus stocks when we're growing up, let's just say, polio virus in cell lines. We used mouse tissues back in the 1930's, to attenuate the polio virus (the royal "we") and then in recent decades, we used *Vero monkey kidney cells* to make the polio vaccine. Well, you cannot remove the other RNA viruses, or you've removed your antigen. So, these particles, as Dr. Berkhout was his name, our former AIDS colleagues, as he wrote, Ben Berkhout, he said, it is possible that the way mouse viruses enter the human virome was the particles were present in the vaccines.

[00:37:03.11] **KIRBY:** What would be the implication to government agencies, and to the pharmaceutical industry if, in fact, these murine and other retroviruses were being spread through the vaccination regimen?

[00:37:21.29] **MIKOVITS:** Well, the implication is that, really, the vaccine program should have ended right then, when we discovered this in 2011. Everything should have stopped. Total moratorium until we can figure this out, because our economy couldn't afford the liability that a, you know, via a contaminated blood supply or contaminated vaccines. Because our work was never to look directly at the vaccines. We did the blood supply work. So, the implications that chronic diseases that are exploding in our world, as we know it, came from vaccines.... As Hillary Johnson wrote in the forward of our first book, *Plague*, "A disease to effect the economy of nations." So, the implications are economically just huge—you couldn't—I don't think the country could have survived *that* implication, especially given the fraud and the denial. *May 15th*, *2020* 

[00:38:30.06] **KIRBY:** So, your work was not about, "We now know it's in the vaccine supply, or this is originated from vaccines?"

[00:38:38.10] **MIKOVITS:** Correct. My work was about the blood supply and likening it to the AIDS epidemic, and that was the big deal, because the AIDS epidemic really was the start of the zoonosis.

[00:38:50.09] **KIRBY:** So, in fact, it's Berkhout's work that makes the connection to vaccines, with XMRV?

[00:38:55.23] **MIKOVITS:** Well, this was an opinion paper, exactly. *April 16*, *2020* 

[00:38:58.18] **KIRBY:** So, I mean, what I'm hearing is, there would have been this massive exposure, massive liability. There would have been a clear implication that the vaccine regimen, as we knew it, was unsafe. But you didn't start out—what was your feeling towards vaccination when you began this research?

[00:39:25.08] **MIKOVITS:** Well, for my whole life, as I told you, from the first day in 1980, for 40 years, the hypothesis we worked with is that we could teach the immune system, we could educate the immune system, to prevent or treat cancer and infectious disease if we understood how they caused pathogenesis, how they caused disease. So, that immune therapy is a vaccine. And so, I'm not at all anti-vaxx, and I even encouraged my siblings to have their children get the Gardasil vaccine, because, of course, at that time, I had no idea—I'm not in vaccine manufacture—I didn't know about the paper that Bob Berkhaut [published] in 2011. I had no idea. I had no idea my work implicated vaccines. I was worried about the blood supply, because that was still 25 million Americans, and we did one of the studies in the UK, and it was 4% in the control groups, and that's a lot of people that the UK and the US have to compensate at the level, and give the kinds of benefits we gave HIV-infected individuals in the '80's and '90's, and to this day.

[00:40:53.19] So, I'm not anti-vaxx because I make immune therapy. Interferon Alpha is your mitigation right now for any RNA virus. In fact, we could make a safe vaccine right now, using Interferon Alpha, using the other drug that we developed in, what, 1986, with Candace Pert, known as Peptide T. Well, the FDA kept Peptide T from coming to the market; and what Peptide T [does] is stop that receptor known as CCR-5 from sticking like Velcro to the white blood cell. So, for coronavirus right now, we could take Interferon Alpha and Peptide T and transiently block a receptor called cannabinoid receptor 2 that doesn't dampen, isn't the dimmer switch on the immune system. So, if we can just stop the flame from getting too high, we just put that in a capsule, and I could put purified virus—no RNA, no DNA, whole virus particles—take it as a capsule, keep it away from the lungs, present it, present the antigen in a natural form to the immune system in the

bone marrow, and you'd have, forever—and this is plug and play. Every RNA virus, we can present it to the right resident stem cells, where we need it to respond, where the disease, where the tissue injury, where we want them to respond.

[00:42:33.02] So, if our work hadn't been censored, and we didn't just stop everything the day we realized this—as a matter of fact, we realized this at a July 22nd, 2009 invitation-only meeting that the NIH held, and in that meeting, the big, "Oh my god," was that the lab workers were *seroconverting*, meaning, developing antibodies. And so, because they were developing antibodies, it meant that all mouse research had to be biosafety level 3, like we worked with with HIV (that is, the double-gloves, and you protect yourself with the HEPA filter, air flow, and you autoclave, you burn out all the trash). You know, it's very simple, and in fact, I used biosafety level 3 measures when I was working in the Nevada Institute, in our institute in Nevada, because we didn't have a biosafety level 3 facility.

[00:43:40.06] And so, what the government did, the title of the chapter in our first book, *Plague*, I think it's chapter eight is, you know, "The July 22nd Invitation- Only Meeting," and after I finished my talk, which showed cancers and neuroimmune disease, Chronic Fatigue Syndrome, and then some childhood diseases, one called Niemann-Picks, which is a childlike Alzheimer's, so some of these diseases that children shouldn't get today, associated with just that one virus (because we didn't realize it was a whole family of viruses, at that time), the people at the meeting said "Oh my god," you know? The heads of our institute said, "Oh my god." And I'm thinking, "Oh, thank you. They saw what I saw." But it wasn't, "Oh my god," it was, "Oh my god, we can't afford to retrofit every mouse facility in the country and make it biosafety level 3."

[00:44:40.07] "We can't afford to protect the lab-workers." And so, I got infected in 2010, [as did] many, many of my colleagues, who worked with mice, when we didn't realize that these viruses could aerosolize. So, what I say in the book is, "contagious cancer." You know, literally, I can cough on you cancer, you know? If you are susceptible enough, you develop it soon, and if you're not, you develop it later or not at all. Or if you use the measures that we know of, that we know protected AIDS patients from getting disease, of course, you would never get illness. But what the government did was cover it up and refuse the drugs to the patients. So, they literally took curative therapies, and the FDA said, "Oh, that's not approved for that. You can't use that, [it's] off-label."

[00:45:42.13] And so, many of, you know, friends and colleagues are literally dead before

[00:45:48.16] **KIRBY:** Judy, isn't the base problem here, what's going on in these labs, these biosafety level 3, 4—whatever—labs, or the ones that aren't taking precautions—but isn't the whole issue this xenotransplantation, attenuation, Gain-of-Function, cycling viruses through, you know, animal tissue.... I mean, is the basis of that, is that the basis of our problem? [00:46:19.27] **MIKOVITS:** Yeah. The basis of our problem is, essentially, every medicine we make is using mouse tissues, biological therapies, growing up in cell lines. This is, I would say, since the 90's—my first job when [I started was,] I was a natural products chemist. So, I isolated chemotherapies from plants. And I'm back to doing that again from the cannabis plant and from other natural plants, from Chinese herbs. We're going back to natural medicine. This would just simply say, "We need to stop every bit of the technologies. All of the—so, rituximab: M-A-B means *monoclonal antibody*—you made it in a mouse, you made it in another human tissue. We have aborted fetal tissue in these vaccines. Well, other human tissue in another human is going to develop

autoimmunity. So, you can see, the entire industry, the pharmaceutical industry, would stop today, or should have stopped in 2011.

[00:47:24.07] **KIRBY:** Can you just briefly take us through the different xenotransfers that are going on, just a quick list, including the aborted fetal cells, and if you could just go into a little bit more depth about why the immune system rejects other human cell lines in these vaccines? But, you know, I've heard you in interviews just kind of bullet point how, you know, the different animal tissues that are used in the different products.

[00:47:51.10] **MIKOVITS:** Right. So, essentially, every gene therapy product, the vectors that we've been using—and I'll just mention the cancer drug everybody's [aware of], it's called CAR-T, Chimeric Antigen Receptor T cells, and I'm sure it was on *Time* magazine for a few years, "Oh, this curative therapy!" Well, that Car-T Cell therapy where we manipulate human tissues and we take your own cancers out and make a chimeric antigen receptor, do we change your own t-cells and put it back, that's made on a murine leukemia virus vector. So, that's how we get that into our genes—

[00:48:30.03] **KIRBY:** Wait. What's "murine?" We don't know what murine means. [00:48:32.03] **MIKOVITS:** Mouse. Mouse. So, that's made on a mouse retrovirus, the ones we discovered. It's made on these mouse virus vectors. So gene therapies would have to stop the way we're doing them now, because those are biologics that are doing xenotransplantation. Essentially, every single vaccine has at least one animal tissue in it, or another human tissue. So, birds: the flu vaccines are made in birds; so, there's at least one retrovirus, and many other RNA viruses, coronaviruses. Everyone, all the animals have coronaviruses, just like all the animals have retroviruses. So, the flu vaccine that was used in Italy had four live influenza, live attenuated influenza viruses, including H1N1, all of which cause upper-respiratory infections. And that one was made in dog cells, dog kidney cells. So, you brought in other viruses, potentially coronaviruses. Here, in the United States, the vaccines are made in chicken, you know, we grow the antigens, the viruses in chickens—

[00:49:52.21] **KIRBY:** And is the idea that these viruses, or retroviruses, in the host animal are fine for the host animal but something happens, you know, they're potentially carcinogenic, or whatever they are, in us? Is that the idea?

[00:50:06.18] **MIKOVITS:** Yeah. So, retroviruses, we have our own *endogenous* retroviruses. And they don't kill us. And the same thing's true [for animals]. So, for instance, Simian Immune Deficiency Virus is the retrovirus that jumped theoretically into humans causing AIDS. So, that's the HIV work we did. So, when you jump species, a virus that's at home (that's *xeno*), that's in the animal, it's called a *commensal*. Just like our microbiome, we have so many microorganisms that are, we call it, "good bacteria"—it helps us, it's at equilibrium with the host, it's no problem. The immune system of the host has it. But every time you inject something foreign into an immune-compromised, the very young, the very old, and, of course, people with genetic primary immune deficiencies, many of which we don't even know because the proteins in the immune system is so large. So, that's the simple answer to—xenotransplantation is anything foreign put in your body from another animal species. And those do and can cause disease. And that's Dr. Ruscetti's discoveries of 1983.

[00:51:25.19] In 1991, at the time of my PhD thesis, HIV was one million Americans. And the group, ACT UP, and others, got drugs used sooner. You remember, it was a similar story to what we're seeing today, "Oh, don't use that dangerous AZT," or this or that drug, you know, and the disease continued. Just like we're hearing today with COVID-19, the mitigation measure should have been Interferon Alpha, which costs, you know, like 50 cents a dose, and a \$600 vial could protect a thousand of the elderly, of the most susceptible populations. So, nobody ever needed to lock down if you use that, and Interferon Alpha, and then hydroxychloroquine, which we knew was also a valuable therapy for viruses coming from bats, even in Ebola, to stop the 2014 outbreak that was used in the doctor that got infected.

[00:52:28.05] **KIRBY:** What are coronaviruses, and then why do you think this is a SARS-CoV-2 plus XMRV? What makes you think that, in terms of the presentation of the illness? [00:52:38.08] **MIKOVITS:** Well, coronaviruses are RNA viruses, and they have, as we know, an envelope that you protect the nucleic acid [with] by building a fatty acid protein envelope around it. It looks like that, a little particle forms. So, the RNA is the blueprint of the virus. And as I mentioned, retroviruses are a different blueprint, an RNA/DNA blueprint (just subtly different), but they're also envelope viruses. So, when you do a test for polymerase chain reaction, what you're doing is, you're taking a small piece (let's just say 10% of the blueprint—150 base pairs out of 8,000), and you're amplifying it artificially in the lab, and making millions of copies out of that one copy and then you call it "a positive." And so, as you know, the PCR tests that are being done now, you do a nasal swab or a throat swab, and scrape the cells that the virus would infect, the epithelial cells, out of the nasal passages, that's where coronaviruses live.

[00:53:47.14] When you do that, it doesn't say an infectious virus at all, it just says a piece of RNA that, in order to see it, you had to amplify a zillion times in that quick short time period of the test. So, the serology testing actually says, "You've been infected because the virus got in your blood. You didn't have the degradation, the machinery in your nose, and you were susceptible, and you did, because of other infections, you actually got an infection that your immune system couldn't handle, and you made an antibody." And that's the principle of all vaccines: You give them the antigen in a low dose, and they make an immune response to it (an antibody), and then the next time they see the pathogen, they don't have to go through that two-day process of making the antibodies, and the virus can't build enough of a reservoir, so you're immediately giving the antibody. The next time it sees the pathogen, you don't get as sick, or maybe you don't get sick at all. So, that is a vaccine strategy, and that's why I said the people that have the antibodies are already immune. They don't need to worry about a vaccine.

[00:55:03.19] **KIRBY:** So, let me, let me just ask you that. They're saying that they're not sure if the people who have had this, or have the antibodies, are going to be immune. Doesn't that undermine the whole argument behind vaccination?

[00:55:16.13] **MIKOVITS:** Exactly. And you know, that is the—so, the only criteria of vaccination is, "Do you develop an antibody?" It's propaganda masquerading as science. This isn't science, no. If you make an antibody—I've heard things like, "Well, the antibody testing says what an *IGG* means, that antibody family, means a past infection. And that would help us to say that this virus has been in this country a lot longer than they say it's been in this country. And then the second thing is, if you make an *IGM* antibody, it's a recent or an acute infection, and then you're not necessarily immune, so you need to be protected in a way, if you've been exposed recently.

[00:56:04.03] So, now I'm hearing, I'm seeing in the press, and seeing people say, "Oh, the IGG antibody is a later stage of disease." And it's not a later stage of disease at all, it's immunity. So, we're playing this word game and we're using "serology positive," which should say, "We've developed a herd immunity. And we've developed a population that can go back to work, because, in fact, they're going to protect the rest of us and the most vulnerable in the US." But now that science is being twisted to say it says something it doesn't say.

[00:56:43.28] **SENATOR RAND PAUL:** The media continues to report that we have no evidence that patients who survive coronavirus have immunity. I think, actually, the truth is the opposite. We have no evidence that survivors of coronavirus don't have immunity, and a great deal of evidence to suggest that they do. The question of immunity is linked to health policy and that workers who have gained immunity can be a strong part of our economic recovery. The silver lining to so many infections in the meat processing industry is that a large portion of these workers now have immunity. Those workers should be reassured that they likely won't get it again, instead of being alarmed by media reports that there is no evidence of immunity. You've stated publicly that

you'd bet it all that survivors of coronavirus have some form of immunity. Can you help set the record straight that the scientific record, as it is being accumulated, is supportive that infection with coronavirus likely leads to some form of immunity? Dr. Fauci?

**DR FAUCI:** Yep, thank you for the question, Senator Paul. Yes, you're correct that I have said that, given what we know about the recovery from viruses such as coronaviruses in general, or even any infectious disease, with very few exceptions, that when you have antibodies present, it very likely indicates a degree of protection.

[00:58:00.23] **KIRBY:** What are your thoughts on lockdown as a method of dealing with an upper respiratory virus?

[00:58:05.02] **MIKOVITS:** My thoughts are just...I mean, I'm horrified by it. It's crazy because we're not developing a natural immunity. We're making people sick in that, certainly, we protect each other, but if people are healthy, they don't spread disease. And that's why I mentioned how many times in PCR you need to amplify that RNA. So, a mask won't protect an animal or piece of viral particle from spreading through the mask; but the mask *will* amplify the viral reservoirs in the person it's in. So, the lockdown is crazy because we don't get a natural herd immunity, but more importantly, the mitigation should have happened is Interferon Alpha and hydroxychloroquine. And the serology testing, all of which costs nothing, and the healthy people can stay working. Healthy people don't spread disease.

[00:59:13.24] **KIRBY:** But we're constantly told that we're asymptomatic carriers, possibly. That's not true?

[00:59:21.00] **MIKOVITS:** Asymptomatic carriers doesn't mean you're expressing virus. And the story I always use with that: sure, you're an asymptomatic carrier; there are millions of Americans right now who are asymptomatic carriers of HIV and XMRV's and many other viruses—influenza viruses—because we've been infected before; so, we're asymptomatic carriers, but we're not spreading disease, if we're not sick. And I say that, and I can say that with great confidence, because back in the '80's, the only time I ever isolated HIV from saliva were people on their death bed. And when Frank Ruscetti and Bernie Poiesz isolated Adult T-cell Leukemia Virus, HTLV-1, it was from the sickest of people with Adult T-cell Leukemia. So, when you're all the way at the end of disease, when you're so sick, those are the people expressing the virus.

[01:00:23.10] So, the sick people in the hospitals (and it's called nosocomial spread), they should be protected, not with a mask, but given oxygen. And the nursing staff should be wearing the masks so that the hospital staff isn't exposed to large amounts of virus. Healthy people don't spread disease. So, everything about the lockdowns prevents natural herd immunity from occurring, and it should have never happened. Everything should have been open yesterday, the day before, last week, because the evidence in this country by those [who have been] serology tested, and by anecdotal data, is many people, at least that I talk to every day, say, "I had that last November." "I had that last summer." "Oh yeah, that was the worst cough I ever got." But when I recovered—you know, they're likely to have made antibodies, and some of those people, we've looked at, they're actually neutralizing antibodies. Means they can prevent infection in the most susceptible. So, all of these measures cost nothing. *Nothing*. And none of this shut down need ever occur because we could have protected people in the beginning with a simple very low dose Type 1 interferon spray and measures of hydroxychloroquine, which has been very safe WHO essential medicine for 70 years.

[01:01:54.16] **KIRBY:** Can you just very briefly talk about what—you've mentioned before CO2. Can you just, quickly, talk about what are the dangers of wearing a mask if you are asymptomatic, if you are healthy?

[01:02:08.00] **MIKOVITS:** Yes. So, if you're wearing a mask and you're healthy, you're

breathing in your own bad air, your own toxic air. So, back and forth through the day. It's very stressful to breathe in toxic air; you're not getting enough fresh air and oxygen, and just the fact of wearing the mask is stressful because it's hard to do, if you've never been a professional doing that. You itch your face, it's wet, it's moisture. It's actually amplifying. It's immune-suppressive. So, you're suppressing, you're damping down your own immune system, your Type 1 interferons, and you're activating your dormant viruses. So, other viruses from within yourself, you're activating such that now you're amplifying them, because you're wearing a mask. You're not protecting anyone, and, in fact, everybody's totally stressed out for all of the reasons they should be—people aren't intended—you know, it's an upper respiratory infection. We've known for at least a century just washing your hands for the medical professionals and protecting yourself from spreading it to healthy individuals.

[01:03:24.14] Healthy individuals rarely spread these things. *May* 15, 2020

[01:03:27.15] **KIRBY:** On the subject of masks, you made the claim that wearing them outside, I suppose, of acute clinical situations, is unhealthful, that it literally activates your own virus. "You're getting sick," you said, "from your own reactivated coronavirus expressions." *Science*, the journal, claims to not know what you mean by that. Can you explain in more detail what you're suggesting?

[01:03:50.06] **MIKOVITS:** Yes. So, 8% of our genome is a virome. And that is, all of the exposures that we've had, and we clear, and we develop immune responses to, many are latent (like Herpes viruses, like those retroviruses). They're dormant. Your immune system is in balance, they're not expressed. If you put on a mask and you're exercising, and you're not breathing air, you're actually breathing CO2. You can actually become—it's called Lactic Acidosis, so you become acid, and you're actually denying yourself oxygen, hypoxia, and then some. It's immune-suppressive. It suppresses your very CD4-positive T cells, that adaptive memory immunity. So, you activate the dormant, because your memory was keeping those silent, and this is just, this isn't new. This isn't just me saying it. This is basic immunology, and they know it. Activate latent viruses, they cause disease. And a mask is immune suppressive and that's clear. *April 16, 2020* 

[01:05:04.03] **MIKOVITS:** I don't deny that SARS CoV-2 exists, and is potentially a pathogenic, more pathogenic, virus to the susceptible. But the people that were liberally called, "COVID-19," without the accurate test, if you haven't made an antibody, if you haven't seroconverted, according to your immune system, you haven't been exposed. RNA in your nose is not exposure. That's why the PCR test is a bad one. 80% of them were false positive. I can make that little piece of virus and pick out thousands of microbes out of your nasal passage. That's why you have an immune system. So, people were sick because anybody who went in with a fever or coughing were called, "COVID-19." And notice how we don't have influenza this year?

[01:06:01.13] So, it's known that the influenza vaccine over the last few years hasn't worked. It's not the right strain, whatever you want to say. But the government again says, "Go get that vaccine anyway." And it's the vaccinated, in two recent papers that are coming out, that get the flu. And you shed that virus so the vaccinated are shedding other upper respiratory infections and you get a respiratory...So, anything that was an upper-respiratory infection was called, "COVID-19." And yes, this novel coronavirus, there's no question it's a novel coronavirus, if it got out, really, the only driving force to send it through 190 countries in a matter of months is through sick people

or the vaccinated, because they're shedding other types of viruses to cripple the immune system. So, we do know that in Italy, in January of 2019, they got that four component, four-influenza virus vaccine, which had never been used before, and those vaccines do kill the susceptible and they do carry coronaviruses, and you would register as "positive for the coronavirus" and possibly the novel coronavirus, because again, the Vero, the Vero E6 cell line was transported between Fort Detrick and Wuhan, China, and North Carolina and other places in the world, because that's the cell line we grow our polio vaccines, our other vaccines, and that's the one they use to grow these coronaviruses.

[01:07:53.21] So, there's not just one virus somewhere. And we know there are many strains, and we're seeing those mutations in some countries where different susceptibilities and different environmental conditions [exist]. So, you know, pollution, cigarette smoking, high blood pressure, diabetes, being overweight—all of those things are risk factors now. Those are the people getting the most severely [compromised], people with other inflammatory diseases. And that makes sense because inflammation, the flame, is that cytokine storm. So, it's like you took that SARS CoV-2 virus and it was throwing gasoline on a fire.

[01:08:37.07] If you throw gasoline on a healthy 20-year-old, or on the grass out there, nothing happens, because they don't have that fire. But in that little trigger is what we tend to say is the straw that broke the camel's back. Again, my husband's got COPD, Chronic Obstructive Pulminary Disease, and he's 81-years-old. So, he's the one that is at risk *every year* of an upper respiratory infection. His COPD was driven by a bacterial infection he got as a young man; but we always protect him. And the one thing we don't do, since I met him, is we *never* vaccinate him, because you don't give somebody who is at risk of an upper respiratory infection driving a disease another upper respiratory infection. And that's what the vaccine strategy is. That's why there's nothing about any of the other candidate vaccines except for the one I described earlier. And that's why they never work, because when you inject the blueprint, the RNA or the DNA of that virus, or you use—I heard it said, "Let's just repurpose our Polio Vaccines." I mean, horror of horrors. I mean, there's nothing that makes sense in anything that's happening in a level.

[01:09:56.13] And it really has nothing to do with the administration in any way, because Tony Fauci stood next to Obama with Ebola, a 14, Zika, a 17, you know, Bush with Anthrax, Bill Clinton - Swine Flu, Bird Flu, Pig flu! What are those? They're zoonosis. They're another animal virus that becomes a virus—could be coronavirus, could be an influenza virus— [01:10:28.08] KIRBY: Are they, you know, more quickly-evolved, man-made, manevolved zoonosis? Those other ones? Are they, you know, xenotransplantation as well? [01:10:43.02] **MIKOVITS:** Well, they well could be, but they never ended up being much of anything in the population, because we never took these kind of ridiculous draconian measures before, so we didn't lock down everything. In fact, the best story is, you know, for what we're proposing, and many doctors around the world, good old-fashioned medicine and nutrition with, you know, that our FDA and our CDC are stopping us from doing, the vitamin C, the Zinc, the various nutritional products that we know work, if we did those, then we would stop the evolution of the viruses. And it gets to a can of worms we probably don't want to get to, because the FDA stopped the production of Interferons for the use of preventing zoonosis of coronaviruses from animals 40 years ago. So, we could have—and what do we do to our animals? Oh, we vaccinate them. So, there's an awful lot going on here, but the fact of the matter is, this is 40 years. This isn't one administration, and this is 40 years of a practice that's literally been controlled by an industry that has an interest in money, and Tony Fauci at the helm, frightening presidents and populations that the next big pandemic is going to wipe out the world like the Spanish flu of 1918.